

**CLASSIFICATION AND CORRELATION
OF
THE SOILS OF**

**HUNTINGTON COUNTY
INDIANA**

AUGUST 1980



**U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
MIDWEST TECHNICAL SERVICE CENTER
LINCOLN, NEBRASKA**

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service
Midwest Technical Service Center
Lincoln, Nebraska 68501

Classification and Correlation
of the Soils of
Huntington County, Indiana

The final correlation conference for Huntington County, Indiana, was held May 19-23, 1980. Those participating in the correlation were David G. Van Houten, field specialist (soils), Soil Conservation Service, Indianapolis, Indiana, (through telephone conversation) and Steve R. Base, soil correlator, Soil Conservation Service, Lincoln, Nebraska. The data reviewed consisted of the initial draft of the manuscript, field notes, laboratory data, field sheets, soil correlation samples, field correlation, and the SCS-SOILS-6 forms. Steve R. Base also participated in the comprehensive field review, which was held July 30-August 3, 1979.

Map symbols consist of a combination of letters or of letters and numbers. The first capital letter is the initial one of the map unit name. The lower-case letter that follows separates map units having names that begin with the same letter, except that it does not separate sloping or eroded phases. The second capital letter indicates the class of slope. Symbols without a slope letter are for nearly level soils. A final number of 2 indicates the soil is moderately eroded and 3 that it is severely eroded.

<u>Field Symbols</u>	<u>Field Mapping Unit Name</u>	<u>Pub. Symbol</u>	<u>Approved Mapping Unit Name</u>
De	Del Rey silty clay loam	ApA	Aptakisic silt loam
BcB2, BcA, To	Blount silt loam, 1 to 4 percent slopes, eroded	) BcB2)	Blount silt loam, 1 to 4 percent slopes, eroded
ChB, ChC, OsA, OsB, OsC, OsD	Chelsea loamy sand, 3 to 12) percent slopes)	ChB)	Chelsea loamy sand, 3 to 12 percent slopes
Ee	Eel silt loam, occasionally flooded	) Ee)	Eel silt loam, occasionally flooded
FoA	Fox loam, 0 to 2 percent slopes	) FoA)	Fox loam, 0 to 2 percent slopes
FoB	Fox loam, 2 to 6 percent slopes	) FoB)	Fox loam, 2 to 6 percent slopes
FoC2, FoC, FoD, OcD2, OcC, RoF	Fox loam, 6 to 12 percent slopes, eroded)))	FoC2)))	Fox loam, 6 to 12 percent slopes, eroded
Ge, Gh	Genesee silt loam, occasionally flooded	) Ge)	Genesee silt loam, occasionally flooded
GlB2, MxB2	Glynwood silt loam, 3 to 7 percent slopes, eroded	) GlB2)	Glynwood silt loam, 3 to 7 percent slopes, eroded
HcA, HcB, HcB2	Haskins loam, 1 to 4 percent slopes	) HcA)	Haskins Variant fine sandy loam, 1 to 4 percent slopes
HeG, MtG	Hennepin silt loam, 30 to 70 percent slopes	) HeG)	Hennepin loam, 30 to 70 percent slopes
Ho, Ad, Ed, Hp, Pc, Wa	Houghton muck, drained)))	Ho)))	Houghton muck, drained
McA	Martinsville loam, 0 to 2 percent slopes	) McA)	Martinsville silt loam, 0 to 2 percent slopes
McB, McC	Martinsville loam, 2 to 8 percent slopes	) McB)	Martinsville silt loam, 2 to 8 percent slopes
Ms	Millsdale silty clay loam	Ms	Millsdale silty clay loam
MtA	Milton silt loam, 0 to 2 percent slopes	) MtA)	Milton silt loam, 0 to 2 percent slopes

<u>Field Symbols</u>	<u>Field Mapping Unit Name</u>	<u>Pub. Symbol</u>	<u>Approved Mapping Unit Name</u>
MtB	Milton silt loam, 2 to 6 percent slopes	) MtB	Milton silt loam, 2 to 6 percent slopes
MtC, MtD	Milton silt loam, 6 to 15 percent slopes	) MtC	Milton silt loam, 6 to 15 percent slopes
MxC2	Morley silt loam, 6 to 12 percent slopes, eroded	) MxC2	Morley silt loam, 6 to 12 percent slopes, eroded
MxD2	Morley silt loam, 12 to 18 percent slopes, eroded	) MxD2	Morley silt loam, 12 to 18 percent slopes, eroded
MxE2, MxE3	Morley silt loam, 18 to 30 percent slopes, eroded	) MxE2	Morley silt loam, 18 to 30 percent slopes, eroded
MzC3, MxC3	Morley clay loam, 6 to 12 percent slopes, severely eroded	) MzC3	Morley clay loam, 6 to 12 percent slopes, severely eroded
MzD3, MxD3	Morley clay loam, 12 to 18 percent slopes, severely eroded	) MzD3	Morley clay loam, 12 to 18 percent slopes, severely eroded
OcA	Ockley loam, 0 to 2 percent slopes	) OcA	Ockley loam, 0 to 2 percent slopes
OcB	Ockley loam, 2 to 6 percent slopes	) OcB	Ockley loam, 2 to 6 percent slopes
Le	Lenawee silty clay loam	Pa	Patton silty clay loam
Mr, Mf	Milford silty clay loam	Pe	Patton silty clay loam, sandy substratum
Pg	Pewamo silty clay loam	Pg	Pewamo silty clay loam
Px	Pits, gravel	Px	Pits, gravel
Py	Pits, quarry	Py	Pits, quarry
RcA	Randolph silt loam, 0 to 2 percent slopes	) RcA	Randolph loam, 0 to 2 percent slopes
RgB, RgB2, MeB	Rawson loam, 2 to 6 percent slopes	) RgB	Rawson Variant fine sandy loam, 2 to 6 percent slopes
RgC, RgC2, MeD	Rawson loam, 6 to 12 percent slopes	) RgC	Rawson Variant fine sandy loam, 6 to 12 percent slopes
Rk, We, Se	Rensselaer loam	) Rk	Rensselaer loam

<u>Field Symbols</u>	<u>Field Mapping Unit Name</u>		<u>Pub. Symbol</u>	<u>Approved Mapping Unit Name</u>
Sh	Shoals silt loam, occasionally flooded	)	Sh	Shoals silt loam, occasionally flooded
Sm, Sl	Sloan silt loam, frequently flooded	)	Sm	Sloan silt loam, frequently flooded
Ud, Or, Ob	Udorthents, loamy, occasionally flooded	)	Ud	Udorthents, loamy
Wo, Hm, Sk	Whitaker loam	)	Wo	Whitaker loam

Series Established by This Correlation:

None

Series Dropped or Made Inactive:

None

Certification Statement:

The state soil scientist has certified that the soil mapping is complete and the detail maps and the general soils map have been joined. He has also certified that the interpretations for all the series used in Huntington County have been coordinated and that the locations of the typical pedons are in the soil areas using that reference name.

Verification of Cooperators Names:

The citations, as they will appear on the cover and on the inside of the front cover of the manuscript, are as follows:

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
IN COOPERATION WITH
PURDUE UNIVERSITY AGRICULTURAL EXPERIMENT STATION
AND
INDIANA DEPARTMENT OF NATURAL RESOURCES
SOIL AND WATER CONSERVATION COMMITTEE

Disposition of Field Sheets:

The original field sheets for Huntington County will be kept at the Indiana State Office where they will later be compiled and finished.

Prior Soil Survey Publications:

There are no prior soil survey publications for Huntington County.

Instructions for Map Compilation and the Map Finishing:

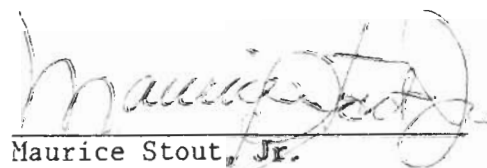
The symbols on the following conventional and special symbols legend are those that will be used in map finishing.

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
CULTURAL FEATURES		CULTURAL FEATURES (cont.)		SPECIAL SYMBOLS FOR SOIL SURVEY	
BOUNDARIES		MISCELLANEOUS CULTURAL FEATURES		SOIL DELINEATIONS AND SOIL SYMBOLS	
County or parish _____		Farmstead, house (omit in urban areas)	e	ESCARPMENTS	CeA FoB2
Minor civil division _____		Church	i		
Reservation (national forest or park, state forest or park, and large airport)		School	f		
Field sheet matchline & neatline _____				SHORT STEEP SLOPE	.....
AD HOC BOUNDARY (label) Small airport, airfield, park, oilfield, cemetery, or flood pool	[Symbol]			SOIL SAMPLE SITE (normally not shown)	(S)
STATE COORDINATE TICK 1890 000 FEET	[Symbol]	WATER FEATURES		MISCELLANEOUS	
LAND DIVISION CORNERS (sections and land grants)	[Symbol]	DRAINAGE			
ROADS		Perennial, double line	[Symbol]	Dumps and other similar non soil areas	[Symbol]
Divided (median shown if scale permits)	[Symbol]	Perennial, single line	[Symbol]	Rock outcrop (includes sandstone and shale)	V
County, farm or ranch	[Symbol]	Intermittent	[Symbol]	Sandy spot	[Symbol]
		Drainage end	[Symbol]	Severely eroded spot	[Symbol]
		Canals or ditches	[Symbol]	Stony spot	O
ROAD EMBLEMS & DESIGNATIONS		LAKES, PONDS AND RESERVOIRS		RECOMMENDED AD HOC SOIL SYMBOLS	
Interstate	[Symbol]	Perennial	[Symbol]		
Federal	[Symbol]			Small undrained depression	@
State	[Symbol]				
Other	[Symbol]				
RAILROAD	[Symbol]				
LEVEES					
Without road	[Symbol]				
DAMS					
Medium or small	[Symbol]				
PITS					
Gravel pit	[Symbol]				

PRIME FARMLAND MAP UNITS

ApA	Aptakisic silt loam, 0 to 2 percent slopes (where drained)
BcB2	Blount silt loam, 1 to 4 percent slopes, eroded (where drained)
Ee	Eel silt loam, occasionally flooded
FoA	Fox loam, 0 to 2 percent slopes
FoB	Fox loam, 2 to 6 percent slopes
Ge	Genesee silt loam, occasionally flooded
GLB2	Glynwood silt loam, 3 to 7 percent slopes, eroded
HcA	Haskins Variant fine sandy loam, 1 to 4 percent slopes (where drained)
McA	Martinsville silt loam, 0 to 2 percent slopes
McB	Martinsville silt loam, 2 to 8 percent slopes
Ms	Millsdale silty clay loam (where drained)
MtA	Milton silt loam, 0 to 2 percent slopes
MtB	Milton silt loam, 2 to 6 percent slopes
OcA	Ockley loam, 0 to 2 percent slopes
OcB	Ockley loam, 2 to 6 percent slopes
Pa	Patton silty clay loam (where drained)
Pe	Patton silty clay loam, sandy substratum (where drained)
Pg	Pewamo silty clay loam (where drained)
RcA	Randolph loam, 0 to 2 percent slopes (where drained)
RgB	Rawson Variant fine sandy loam, 2 to 6 percent slopes
Rk	Rensselaer loam (where drained)
Sh	Shoals silt loam, occasionally flooded (where drained)
Wo	Whitaker loam (where drained)

Approved: August 20, 1980


Maurice Stout, Jr.
Head, Soils Staff
Midwest TSC

CONVERSION LEGEND RELATING
FIELD MAP SYMBOL TO PUBLICATION SYMBOL

<u>Field Symbol</u>	<u>Publication Symbol</u>	<u>Field Symbol</u>	<u>Publication Symbol</u>
Ad	Ho	MxD2	MxD2
BcA	BcB2	MxD3	MzD3
BcB2	BcB2	MxE2	MxE2
ChB	ChB	MxE3	MxE2
ChC	ChB	MzC3	MzC3
De	ApA	MzD3	MzD3
Ed	Ho	Ob	Ud
Ee	Ee	OcA	OcA
FoA	FoA	OcB	OcB
FoB	FoB	OcC	FoC2
FoC	FoC2	OcD2	FoC2
FoC2	FoC2	Or	Ud
FoD	FoC2	OsA	ChB
Ge	Ge	OsB	ChB
Gh	Ge	OsC	ChB
G1B2	G1B2	OsD	ChB
HcA	HcA	Pc	Ho
HcB	HcA	Pg	Pg
HcB2	HcA	Px	Px
HeG	HeG	Py	Py
Hm	Wo	RcA	RcA
Ho	Ho	RgB	RgB
Hp	Ho	RgB2	RgB
Le	Pa	RgC	RgC
McA	McA	RgC2	RgC
McB	McB	Rk	Rk
McC	McB	RoF	FoC2
MeB	RgB	Se	Rk
MeD	RgC	Sh	Sh
Mf	Pe	Sk	Wo
Mr	Pe	S1	Sm
Ms	Ms	Sm	Sm
MtA	MtA	To	BcB2
MtB	MtB	Ud	Ud
MtC	MtC	Wa	Ho
MtD	MtC	We	Rk
MtG	HeG	Wo	Wo
MxB2	G1B2		
MxC2	MxC2		
MxC3	MzC3		

CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSIS

Laboratory Data--Purdue University^{1/}

<u>Sampled As</u>	<u>Sample No.</u>	<u>Publication Map Symbol</u>	<u>Approved Classification</u>
Aptakisic	S78IN69-12	ApA	Aptakisic
Blount	S77IN69-1	BcB2	Blount
Fox	S78IN69-6	FoB	Fox
Haskins	S78IN69-5	HcA	Haskins Variant ^{2/}
Hennepin	S77IN69-2	HeG	Hennepin
Martinsville	S78IN69-13	McB	Martinsville taxadjunct ^{2/}
Millsdale	S77IN69-7	Ms	Millsdale
Morley	S77IN69-3	MxC2	Morley
Ockley	S77IN69-4	OcA	Ockley taxadjunct ^{2/}
Patton	S78IN69-1	Pa	Patton
Patton sandy substratum	S78IN69-2	Pe	Patton
Pewamo	S77IN69-5	Pg	Pewamo taxadjunct ^{2/}
Randolph	S77IN69-6	RcA	Randolph
Rawson	S78IN69-3	RgB	Rawson Variant ^{2/}

^{1/}SCS-SOILS-8 forms have been prepared.

^{2/}Refer to "Notes to Accompany Classification and Correlation."

Notes to Accompany
Classification and Correlation
of the Soils of
Huntington County, Indiana

by
Steve R. Base

APTAKISIC SERIES

The B22t and B3t horizons have a higher chroma than is typical for the series. Also, the lower part of the B horizon and the C horizon lack strata of sand..

BLOUNT SERIES

Some pedons have an Ap horizon with a higher chroma than is typical of the series.

CHELSEA SERIES

This soil contains lime in the lower part of the profile but is not considered to be a taxadjunct.

HASKINS VARIANT

The IIB and IIC horizons contain less clay than is allowed in the series. It is an Aeric Ochraqualf; fine-loamy, mixed, mesic.

MARTINSVILLE SERIES

This soil has a base saturation of 47 percent at 50 inches below the top of the argillic horizon. It is a taxadjunct and classifies as an Ultic Hapludalf; fine-loamy, mixed, mesic.

MILLSDALE SERIES

The upper subsoil is more alkaline and the IICg horizon contains more coarse fragments than is typical for the series.

MILTON SERIES

Some of the Milton soils in Huntington County seem to be underlain with dolomite and siltstone.

OCKLEY SERIES

This soil is a taxadjunct because it contains less clay in the upper part of the subsoil than is typical for the series and lacks an argillic horizon. It is a Dystric Eutrochrept; coarse-loamy, mixed, mesic.

PATTON SERIES

The Patton soil in map unit Pa, Patton silty clay loam, has a little thinner A horizon than is typical for the series.

PEWAMO SERIES

This soil lacks an argillic horizon and is a taxadjunct to the series. It is a Typic Haplaquoll; fine, mixed, mesic.

RANDOLPH SERIES

This soil has an A&B horizon.

RAWSON VARIANT

This soil is a taxadjunct because it contains less clay than defined for the Rawson series. It is a Typic Hapludalf; coarse-loamy, mixed, mesic.

CLASSIFICATION OF THE SOILS

<u>Soil Series</u>	<u>Soil Family</u>
Aptakisic	Aeric Ochraqualfs; fine-silty, mixed, mesic
Blount	Aeric Ochraqualfs; fine, illitic, mesic
Chelsea	Alfic Udipsamments; mixed, mesic
Eel	Aquic Udifluvents; fine-loamy, mixed, nonacid, mesic
Fox	Typic Hapludalfts; fine-loamy over sandy or sandy-skeletal, mixed, mesic
Genesee	Typic Udifluvents; fine-loamy, mixed, nonacid, mesic
Glynwood	Aquic Hapludalfts; fine, illitic, mesic
Haskins Variant	Aeric Ochraqualfs; fine-loamy, mixed, mesic
Hennepin	Typic Eutrochrepts; fine-loamy, mixed, mesic
Houghton	Typic Medisaprists; euic, mesic
*Martinsville	Typic Hapludalfts; fine-loamy, mixed, mesic
Millsdale	Typic Argiaquolls; fine, mixed, mesic
Milton	Typic Hapludalfts; fine, mixed, mesic
Morley	Typic Hapludalfts; fine, illitic, mesic
*Ockley	Typic Hapludalfts; fine-loamy, mixed, mesic
Patton	Typic Haplaquolls; fine-silty, mixed, mesic
*Pewamo	Typic Argiaquolls; fine, mixed, mesic
Randolph	Aeric Ochraqualfs; fine, mixed, mesic
Rawson Variant	Typic Hapludalfts; coarse-loamy, mixed, mesic
Rensselaer	Typic Argiaquolls; fine-loamy, mixed, mesic
Shoals	Aeric Fluvaquents; fine-loamy, mixed, nonacid, mesic
Sloan	Fluvaquentic Haplaquolls; fine-loamy, mixed, mesic
Udorthents	Udorthents; loamy, mixed, mesic
Whitaker	Aeric Ochraqualfs; fine-loamy, mixed, mesic

*Taxadjunct--See "Notes to Accompany Classification and Correlation of the Soils of Huntington County, Indiana," for details.